DOCUMENT RESUME

ED 263 215 TM 850 710

AUTHOR Jordan-Davis, Walter E.; Butler, Douglas M.
TITLE Social, Environmental, and Cognitive Predictors of Social and Psychological Adjustment in Adolescents: A Theoretical Model.
INSTITUTION Austin Independent School District, Tex. Office of Research and Evaluation.
REPORT NO AISD-ORE-84-40
PUB DATE 85
NOTE 19p.; Paper presented at the Annual Meeting of the American Educational Research Association (69th, Chicago, IL, March 31-April 4, 1985).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Adolescent Development; Adolescents; Egocentrism; Emotional Adjustment; *Family Environment; *Models; Prediction; Secondary Education; *Self Concept; Self Evaluation (Individuals); Social Adjustment; *Social Cognition; Social Development; *Social Environment

ABSTRACT

This paper outlines a model that could address the interaction between an adolescent's social and personal environment and the impact that this interaction could have on an adolescent's social and psychological adjustment. In addition, a set of mediating variables based on an adolescent's self-concept was presented and discussed. The unique aspect of this model is the inclusion of self-concept as a mediating variable. This model was developed to help analyze data included in a future study that will examine factors that affect the social and psychological adjustment of adolescents enrolled in junior and senior high school (grades 7-12). (Author)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED263215

SOCIAL, ENVIRONMENTAL, AND COGNITIVE PREDICTORS OF SOCIAL AND PSYCHOLOGICAL ADJUSTMENT IN ADOLESCENTS: A THEORETICAL MODEL

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

Walter E. Jordan-Davis
Austin Independent School District
Department of Management Information
Office of Research and Evaluation
6100 Guadalupe
Austin, Texas 78752

Douglas M. Butler
Austin Independent School District
Department of Management Information
Office of Research and Evaluation
6100 Guadalupe
Austin, Texas 78752

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

W.E. Jordan-Davis

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

TM 850 710

Publication No. 84.40

Paper presented to the American Educational Research Association, Chicago, Illinois, March-April 1985.

Disclaimer

The opinions and conclusions expressed in this report are those of the author(s) and do not necessarily reflect the position or policy of the Austin Independent School District or the Office of Research and Evaluation; no official endorsement should be inferred.

Abstract

This paper outlined a model that could address the interaction between an adolescent's social and personal environment and the impact that this interaction could have on an adolescent's social and psychological adjustment. In addition, a set of mediating variables based on an adolescent's self-concept were presented and discussed. The unique aspect of this model is the inclusion of self-concept as a mediating variable. This model was developed to help analyze data included in a future study that will examine factors that affect the social and psychological adjustment of adolescents enrolled in junior and senior high school (grades 7-12).

84.40

Social, Environmental, and Cognitive Predictors Of Social and Psychological Adjustment in Adolescents: A Theoretical Model

One of the major problems confronting school systems and social service agencies is understanding the psychological and social conditions facing adolescents (Ingersoll, 1981; and Magnusson, Duner, & Zetterblum, 1975). If school systems and social service agencies are to work towards the primary prevention of the problems facing adolescents, there must be a thorough understanding of adolescents and the environmental and social factors which influence their social and psychological adjustment (Arkoff, 1968). Efforts to implement preventive programs and policies have often had minimal impact (Breakwell, 1983). These attempts failed, in part, because they neglected to consider the interactions between an environmental setting and the individual's cognitive adaptation to that environment (Bronfenbrenner, 1977; and Moos & Insel, 1974).

One of the most appropriate places to begin the examination of the interaction between an individual and the environment is in the school setting (Brennan, 1975). The school environment functions as a setting where adolescents are in the process of developing life styles which will in large part determine their future adjustment (Erikson, 1976; and Johnson, 1973). Understanding of the complexity of the variety of factors which influence adjustment is made difficult for two reasons: 1) An individual's adjustment is impacted by a wide range of social factors (such as educational and occupational access); and 2) The interaction of social factors with the personal factors of an individual (such as self-esteem) (Taifel, 1982; and Burns, 1979).

Given the complexity that arises from the interaction of social, environmental, and cognitive structures there is a need for a conceptual and investigative framework to organize the factors and to strengthen prediction in these important areas (Webster & Sobieszek, 1974). A socio-ecological framework could be appropriate to explore the above interaction because it allows for the inclusion of social, psychological, and cognitive predictors (Bronfenbrenner, 1977; and Moos, 1976). The socio-ecological model to be discussed in this paper suggests that two sets of environmental variables--socio-demographic and family/home environment--have direct effects upon social and psychological adjustment. In addition, the model suggests that these variables are mediated by personal cognitions, which are internalized as the self-concept (Ittelson, 1973). In later work this model will be tested by examining the manner in which the specified variables combine and interact with one another in affecting social and psychological adjustment (Morrill, Hurst, Oetting, et al., 1980).

The model presented here will be used in future work to analyze data obtained from a needs assessment study. This needs assessment study was conducted by several social service agencies with the assistance of the Austin Independent School District's Office of Research and Evaluation. The data base consists of a random sample of over 1200 junior high and senior high school students' responses to more than 400 survey items.

Students involved in this study were asked to report knowledge, attitudes, and behaviors related specifically to environmental and personal factors. The data base also contains demographic and personal background information for each member of the sample.

Self-concept will be defined in terms of personal cognitions which are internalized as personal attributes. The following broad research questions were raised by this definition: 1) What are the behavioral effects of individual interpretations of self-concept?; and 2) Do individuals who express negative behaviors across a variety of situations share personality and environmental cognitions which are distinct from those individuals who do not respond in this way. This paper will also address the following specific issues: 1) adolescents respond to the environment on the basis of the cognitions or meanings that elements of the environment have for them as individuals; 2) societal/cultural meanings are modified through individual interpretation of the interaction between socio-demographic and home environment variables; and 3) the relationships among the stated variables will differ by socio-demographic background factors, such as social class, ethnicity, and gender.

THEORETICAL MODEL

THE MODEL

The theoretical model is depicted in Figure 1. A major purpose of this model is to assist educational researchers in designing studies that examine the relationship between socio-demographic factors, family/home factors, and self-concept. Clarification of these factors should assist schools in the formulation of progams which could ameliorate social and psychological adjustment problems that result from social and psychological differences in the life of adolescents.

A Theoretical Model

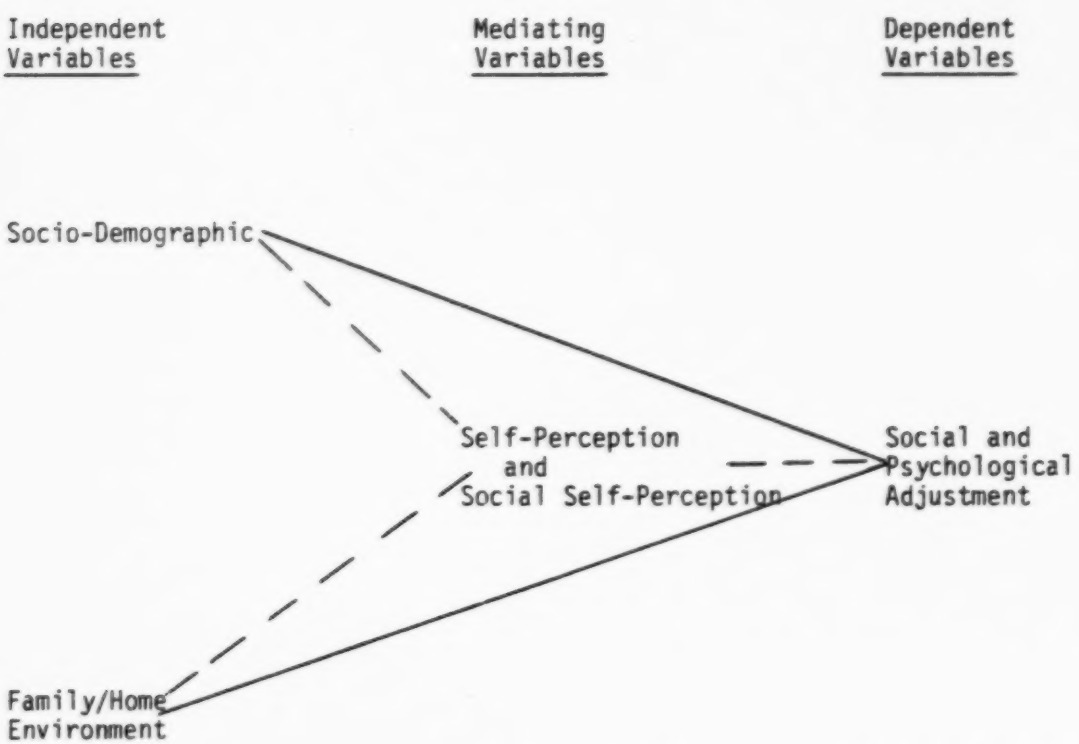

Figure 1. A THEORETICAL MODEL TO EXAMINE THE SOCIAL, ENVIRONMENTAL, AND COGNITIVE PREDICTORS OF SOCIAL AND PSYCHOLOGICAL ADJUSTMENT IN ADOLESCENTS. RECIPROCAL EFFECTS ARE NOT INCLUDED IN THIS MODEL. THIS MODEL WAS ADAPTED FROM THE WORKS OF BRONFENBRENNER, EPSTEIN, AND MOOS.

The model was designed to enable a researcher to become an interventionist. As an interventionist, the researcher can actively plan and execute the changes so that various aspects of the theory may be tested. Structuring the model using this approach is very beneficial. The model is able to:

1. Provide a means of diagnosing social and psychological factors which impacts an adolescent.

2. Provide specific predictions that may be used to explain an adolescent's present state of functioning and the factors that may lead to an improvement in functioning.

3. Allow viewing of the changes that are necessary, the sequence with which they may be brought about, and the probable resisting forces.

4. Suggest areas of intervention which can be impacted to help bring about the desired changes.

5. Provide researchers with the information needed to measure the effectiveness of changes.

The unique aspect of this model is that it not only incorporates socio-demographic, family/home environment, and social and psychological adjustment variables, but it also suggests a way to examine a set of mediating variables. The mediating variables included in this study concern an individual self-concept as depicted by self-perception and social self-perception. Social self-perceptions for the purpose of this model are adolescents' description of how others perceive them. (These concepts will be described in greater detail in the section describing mediating variables.) Specifically, the model suggests that adolescent's social and psychological adjustment is influenced by their perception of how peers, parents and teachers perceive them. The model presented in this paper is based in part on Epstein's (1980) definition of self-concept. Epstein recognized the difficulty of universally defining the concept of self as an explanatory construct. Epstein suggests that this difficulty can be avoided if self-concept can be defined as "self-theory" because all individuals have in common a perception (or theory) of themselves. To carry Epstein's paradigm a step further we add the concept of social self-perception. An individual also formulates an impression of how he is viewed by others. Any discrepancy that exists between self- and social self-perception could have a significant impact on an adolescent's adjustment. Katz and Zigler (1967) stated that this discrepancy could be measured and that such discrepancies could have an impact on self-image.

Galbo (1983) suggests that one way to inquire into the nature of contemporary youth and their problems would be to focus upon the quality of the relationship between youth and adults. The inclusion of the

impact of significant others could--included in this model--yield valuable information toward understanding adolescents' attitudes towards the adults they perceive as important. Galbo (1984) presented a series of research findings which focused on studies that explored the influence of significant adults in the lives of adolescents. His research focused on the following topics: (1) Who are the significant adults with whom adolescents voluntarily associate? (2) What characteristics of significant adults are identified by adolescents? (3) At what point do adolescents notice that particular adults are significant? (4) In what settings do adolescents associate with significant adults? (5) To what extent are teachers perceived as being significant adults? (6) What relationships exist between adolescent's perceptions of adults and alienation? All of these questions have a particular significance to the development of this model. The approach outlined in this paper advocates the institution of primary intervention techniques to ameliorate the social and psychological problems of junior and senior high school students. Primary prevention focuses on the prevention of maladjustment at its points of origins. The theoretical model described in this paper includes several of the most important points of origins:

1. Socio-demographic factors,

2. Family/home environment factors, and

3. Variables associated with the self-concept--the unique feature of this model.

The following discussion will briefly describe each of these sets of variables.

INDEPENDENT VARIABLES

The independent variables are listed in Figure 2. These variables were selected for discussion because social/psychological theory is centered on the processes by which individuals learn and adapt the ideas, beliefs, and values, and norms of their culture and integrate these into personality structures. Acceptable and unacceptable behaviors along each of these dimensions are defined by each society's subgroups and social classes. (Muuss, 1968).

The first set of independent variables--socio-demographic variables--are global social-status indicators. To throw new light on the question of how mental dsyfunction is related to social environment, Hollingshead & Redlich (1953), approached the problem from the perspective of socio-economic class. A statistical test of their hypothesis--which stated that mental dsyfunction is related to socio-economic status--showed that there was a definite connection between socio-economic status and the emergence of social/psychological disorders. However, their study failed to examine in close detail the connections between the two factors--mental disorders and socio-economic status, or their functional relationships.

Selected Independent Variables

Socio-Demographic Variables

Age
Ethnicity
Gender
Grade Level
Social Economic Level

Family/Home Environmental Variables

Head of Family (Male/Female)
Family Structure (Nuclear or Extended Family)
Family Stability (Divorce or Separation)
Number of Persons in Household
Number of Siblings

Figure 2. SELECTED INDEPENDENT VARIABLES FOR INCLUSION IN A THEORETICAL MODEL TO EXAMINE THE SOCIAL, ENVIRONMENTAL, AND COGNITIVE PREDICTORS OF SOCIAL AND PSYCHOLOGICAL ADJUSTMENT IN ADOLESCENTS.

Marjoribanks (1979) stated that these "gross" variables have accounted for only small percentages of variance in measures of affective characteristics. He further stated that these variables have failed to reflect the dynamics of the learning environments that families create for their children. The findings of a later study conducted by Marjoribanks (1984) showed that improvement in students' learning environments could be enhanced if school officials had an improved understanding of how family/home environments relate to student performance and adjustment. Marjoribanks' study took into account students' perceptions of their family/home environments. In addition, his study showed that the relationship between family/home environment and adolescents' aspirations vary by ethnicity and social status. As a result of these findings, Marjoribanks advocates examining family/home environment in terms of proximal socio-psychological variables that can be manipulated to improve parent-teacher programs aimed at improved student functioning. It is for this reason in part that this study utilizes a two-tiered set of independent variables.

MEDIATING VARIABLES: SELF-CONCEPTION

This review will focus on two broad aspects of an adolescent's self-concept--self-perception and social self-perception. These variables are outlined in Figure 3. The term self-concept is very broad and has many components--for the interest of brevity and clarity this paper will focus only on two aspects of the self-concept--self-perception and social self-perception.

Mediating Variables

Self-Concept

Self-Perception (Appraisal of Oneself)
Social Self-Perception (Reflective Appraisal of Oneself)

Figure 3. MEDIATING VARIABLES FOR INCLUSION IN A THEORETICAL MODEL TO EXAMINE THE SOCIAL, ENVIRONMENTAL, AND COGNITIVE PREDICTORS OF SOCIAL AND PSYCHOLOGICAL ADJUSTMENT IN ADOLESCENTS.

The literature (Elkind, 1967; Eibeson, 1967; Herzberger, 1981 and Jones, 1983) suggest that our realities are predicated by our perceptions of what is expected in our world. And that world and what is expected is in large part determined by our experiences in our immediate environment and by our demographic characteristics (i.e., our age, the ethnic group to which we belong, our gender, our family stability, and the family structure in which we live, etc.) In reference to this point, Thomas (1966) writes, "If people perceive situations as real then they are real in their consequences." That is, individuals will act according to what reality is perceived to be.

Cooley (1902) helped develop the bridge between perceptions and the self-concept. Such a bridge is helpful in this paper in that self-conception, as a mediating variable, provides a different conceptualization of adolescent social and psychological adjustment. However, before continuing with the social interactionist perspective of self-conception development extended by Cooley (1902), it is imperative that the foundations of the self-concept in the literature be addressed.

The Early Controversy

The self-concept is defined as "the perceptions, attitude, feelings, and values that characterize the "I" or "me" aspects of personality." (Kaplan, 1971 pp 266).

Theoretically, interpretation of the self-concept varied due in part to the lack of initial empirical investigation. The literature pertaining to self-concept suggest confusion as evidenced by the interchange of conceptual definitions. For example, intending to mean the same thing, self-esteem and self-concept are often referred to interchangeably. Theoretical development of the concept stems from the works of James (1892), Cooley (1902), and Mead (1934). The works of these persons are the fundamental foundations for empirical investigation of the self, particularly self-perception.

A commonly accepted definition of self was presented by James (1892). He defined self as the sum total of what the individuals consider themselves to be, including all their possessions: their bodies, their traits, abilities, opinions, aspirations, family, work, material possessions, friends, and social affiliations. James defines self-esteem in a formula where one's successes are divided by one's pretensions or expectations:

$$\text{self-esteem} = \frac{\text{successes}}{\text{Pretensions/expectations}}$$

This equation suggests that self-esteem is the result of success in differing situations in relation to an individual's expectation for success in particular situations. James postulated three components of the aspects of the "me": the "material me," the "social me," and the "spiritual me." Of particular concern is the "social me" which James defined as a multiple category in which "there is a separate social self for every outside person who recognized the individual and carries their image in mind." (James, 1892, p. 7)

Cooley (1902), in a later discussion of the "social me," recognized that self-development is influenced by others outside the individual; however, he argued that a person tends to accept the view of himself held by those admired. Cooley referred to this concept as the "looking-glass self":

> ...as we see our face, figure, and dress in the glass, and are interested in them because they are ours, and pleased or otherwise with them...so in imagination we perceive in another's mind some thought of our appearance, manners, aims, deeds, character, friends, and so on, and are variously affected by it. The thing that moves us to pride or shame is not the mere mechanical reflection of ourselves, but an imputed sentiment, the imagined effect of this reflection upon another's mind. (Cooley, 1902, p. 152)

Thus, Cooley's quote suggests that the self-conception includes a perception of self which evolves out of a social self-perception which is the perception held of how others perceive us.

Building on the concept of the "social me," Mead (1974) asserts that the self emerges through social interaction with others; which he refers to as the process of social interaction. Mead's process of social interaction consists of five components:

1. The social act--a transaction involving two or more persons among whom there is a division of labor;

2. Role-taking--the ability to visualize one's own performance from the standpoint of the others;

3. A generalized other--the role taken by participants of an interaction where a common perspective is shared;

4. Gesture--any perceptible sound or movement which indicates to a second party the inner experience or intentions of the first, for example, an act may become a gesture when an observer responds to it in terms of what it represents;

5. A significant symbol--a gesture that has the same meaning for two or more people. For a child, parents serve as initial significant others. Erikson (1968), in his views on identity, articulates how significant others (e.g., parents) impacts on identity formation. He indicates that identity is obtained from achievement that has meaning in the culture. Identity, he believes, arises out of a gradual integration of all identifications. Because of this, Erikson believes it is important for children to come into contact with adults with whom they can identify. Erikson generates an eight-stage developmental sequence of identity growth (Erikson, 1968). His conception of identity formation is similar to the Cooley-Mead formulation concerning the role of the generalized other. That is, identity is the emerging configuration of identifications and capacities, a function of direct experience of self and the world and perceptions of the reactions of others to self. (Erikson; 1968)

The Self-Conception in Adolescence

The perception of the reactions of others to self takes on differing forms in adolescence. That is, what Elkind (1967) and others label as egocentrism (the failure to differentiate between the cognitive concerns of others and those of the self) diminish with the onset of formal operations. Elkind (1967) offers the explanation that the anticipatory imaginary audience is progressively modified to take into consideration the "real audience." That is, by the age of 15 or 16, the age at which formal operations becomes firmly established (Piaget, 1962), adolescents turn their concern to the perception of what significant career role

models might hold of them. Erikson makes similar observations. By definition, (Erikson, 1968), the adolescents' identity is the self-reflective aspect of growth. Erikson considers that what the adolescent perceives himself to be in the eyes of others, compared with what he himself feels he is, is the crucial component of a struggle to maintain a continuity between past and present. In psychological terms, identity formation employs a process of simultaneous reflection and observation of others in relation to a personally significant typology. The adolescent's self-judgement, according to the tenents of Erikson's formulation, contains a depository of what the adolescent perceives as another's judgement of him.

The idea that self-perception and social self-perception vary by age is derived in part from Piagetan theory--where the adolescent is caught in a stage of egocentrism. With increasing age the cognitive task is to decenter and gradually complete the move away from egocentrism. This process involves continual refocusing of perspective and the acquisition of multiple perspectives. For a more extensive review of this concept the reader is referred to Singer and Revenson's (1978) book: A Piaget Primer: How a Child Thinks.

DEPENDENT VARIABLES

The most salient set of dependent variables related to the proposed study include: normlessness, powerlessness, societal estrangement, and self-reported delinquency. See Figure 4 for a listing of these variables.

Selected Dependent Variables
Social and Psychological Adjustment
Normlessness
Powerlessness
Societal Estrangement
Self-Reported Delinquency

Figure 4. SELECTED DEPENDENT VARIABLES FOR INCLUSION IN A THEORETICAL MODEL TO EXAMINE THE SOCIAL, ENVIRONMENTAL, AND COGNITIVE PREDICTORS OF SOCIAL AND PSYCHOLOGICAL ADJUSTMENT IN ADOLESCENTS.

The presence of maladjustment in high schools is evident in the frustration and difficulty encountered by reluctant learners, dropouts, and delinquents. Perhaps the most salient indicator of maladjustment is the high school dropout rate.

Kaplan (1971) noted that:

> Nationally almost 28 percent of the students who enter the fifth grade do not remain to graduate from the twelfth grade.
>
> The dropout, contrary to popular opinion is not necessarily a student who is below average in intelligence. The difference in intelligence between those who stay in school and those who leave is not as great as might be supposed. (Kaplan, 1971, p. 30)

The theoretical model presented in this paper also addressed the problems encountered by reluctant learners, dropouts, and delinquents. (The social, psychological, and cognitive variables discussed in this paper address many of the problems facing all adolescent groups.) Schreiber (1968) prepared a portrait of the average dropout. He described the average dropout as follows:

> Although each dropout is an individual whose reasons for dropping out are peculiar to himself, these studies have developed a portrait of an average dropout. He is just past his 16th birthday, has average or slightly above average intelligence, and is more likely to be a boy than a girl. He is functioning below his potential: he is below grade level in reading: and academically he is in the lowest quartile. He is slightly over age for his grade, having been held back once in the elementary or junior high school grades. He has not been in trouble with the law, although he does take up an inordinate amount of the school administrator's time because of truancy and discipline. He seldom participates in extracurricular activities: he feels rejected by the school, and in turn, rejects the school. His parents were school dropouts, as were his older brother and sister. He says that he is leaving school because of lack of interest but that he will get a high school diploma, in some way or other, because without it he cannot get a good job. He knows the reception that awaits him in the outside world, yet believes that it cannot be worse than remaining in school (Schreiber, 1968, p.5-7)

Bower (1961) also noted a surprising finding pertaining to dropouts. He surveyed several studies and discovered a decline in the percentage of maladjusted children in high schools as students progress from the ninth through the twelfth grades. He discovered that at the ninth grade, 9 to 10 percent had been classified as emotionally disturbed. By the 12th grade, only about 3 percent are so classified. This decline was probably not due to a reduction of emotional disturbance among high school students, but to the fact that disturbed children tend to drop out of school so that their problems are transferred from the school to the community.

It should also be noted that the behavior of maladjusted students tax the ability of school officials to focus needed attention on "normal" students. Counselors, psychologists, administrators, and other members of the school staff are at times overburdened with the problems of maladjusted youth--the minority of the student population--that they have little time to devote to the majority of students in the school.

For researchers who are interested in these variables, Robinson & Shaver (1973) have produced a sourcebook of empirical instruments designed to assist researchers who are actively involved in social research, especially those conducting survey work in psychology and sociology. This sourcebook contains a listing of scales designed to measure normlessness, powerlessness, societal estrangement, self-reported delinquency, and other social and psychological adjustment variables.

Summary

The objective of the paper was to describe a prediction model that could aid in the understanding of adolescents (junior and senior high school students) and the social environmental and cognitive factors which influence their social and psychological adjustment. We have focused on adolescents in a school setting because the junior and senior high school years are key transitional times. Hamburg (1974) discusses the challenges and associated tasks for adolescents in junior high school, while Burke & Weir (1978) have noted these same issues for senior high school students.

This paper has addressed several key issues pertaining to the social and psychological adjustment of junior and senior high school-age adolescents. The authors were concerned with the practical implications, that arise from adolescents' socio-psychological problems and how these problems may interfere with the educational process.

The paper began with a discussion of the independent variables of the model--socio-demographic factors and family/home environment factors. The focus here concerned items that were casually linked with social-psychological adjustment problems--dependent variables.

One unique aspect of this paper centered on the discussion of mediating variables--self-perception and social self-perception. It was theorized that these variables may have an impact on students' social and psychological adjustment. Specifically, this discussion focused on the issue of discrepancy between self-perception and social self-perception. It was also hypothesized that this difference would also have a significant impact on adolescents' adjustment.

Several studies were reviewed which examined how external factors could also impact both cognitive mediating variables and adolescent adjustment variables.

This review also presented justification for this particular approach to the problem of adjustment and an integrative model which outlines this approach. The benefits of this model is its organization, clarity, and the inclusion of cognitive mediators.

Educational Implications

This model could assist school systems and social service agencies in working towards the primary prevention of the social and psychological problems confronting adolescents. An actual test of this model should provide school districts and interested others with:

1. A better understanding of the social and psychological adjustment problems of adolescents enrolled in a junior or senior high school.

2. An enhanced understanding of how adolescents' perceptions influence their behavior.

3. A better understanding of the psychodynamics of adolescents.

This model also highlights the importance of including self-concept enhancing activities in educational programs targeted at those adolescents experiencing adjustment problems.

References

Arkoff, A. Adjustment and Mental Health. New York: McGraw-Hill Book Company, 1968.

Bower, E. M., et al., The Education of Emotionally Handicapped Children. Sacramento: California State Department of Education, March 1961.

Breakwell, G. ed. Threatened Identities. New York: John Wiley & Sons, 1983.

Brennan, T. Theory Validation and Aggregate National Data: Integration Report of the Office of Youth Development Research. Boulder, Colorado: Behavioral Research and Evaluation Corporation, 1975.

Bronfenbrenner, U. Toward an experimental ecology of human development. American Psychologist, 1977, 32, 513-531.

Burke, R. H., and Weir, T. Sex differences in adolescent life stress, social support, and well-being. The Journal of Psychology, 1978, 98, 227-228.

Burns, R. The Self-Concept. London: Longman Group Limited, 1979.

Cooley, C.H. Human Nature and the Social Order. New York: Scribner's, 1902.

Elkind, D. Conceptual orientation shifts in children and adolescents. Child Development, 1966, 37, 493-498.

Elkind, D. Egocentrism in adolescence. Child Development, 1967, 38, 1025-1034.

Epstein, S. The self-concept: A review and the proposal of an integrated theory of personality. In. E. Staub (ed.), Personality: Basic Aspects and Current Research. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1980.

Erikson, E. Identity, Youth, and Crisis. New York: W.W. Norton & Company, Inc., 1968.

Erikson, E.H. Identity and the Life Cycle. Psychological Issues, 1959, Vol. 1, No. 1, New York: International Universities Press, 1959.

Galbo, J. Adolescents' perceptions of significant adults. Adolescence, 1983, 70, 417-427.

Galbo, J.E. Adolescents' perceptions of significant adults: a review of the literature. Adolescence, 1984, 19 (76), 951-970.

Hamburg, B. A. Early adolescence. A specific and stressful stage of the life cycle. In G.V. Coelho, D.A. Hamburg, and J.E. Adams (Eds.), Coping and Adaptation. New York: Basic Books, 1974.

Herzberger, S.D. Dix, T., Erlebacher, A. and, Ginsburg, M. Merrill-Palmer Quarterly, 1981, 27 (1), 15-29.

Hollingshead, August B. and Redlich, Frederick C. Social stratification and psychiatric disorders. American Sociological Review, 18 (1953), pp. 163-169.

Ingersoll, G. Adolescents in School and Society. Lexington, Massachusetts: D.C. Heath and Company, 1981.

Ittelson, W. ed. Environment and Cognition. New York: Seminar Press, 1973.

James, W. Psychology: The Briefer Course. New York: Holt, 1892.

Johnson, F. ed. Alienation. New York: Seminar Press, 1973.

Jones, L.E. Multidimensional models of social perception, cognition, and behavior, Applied Psychological Measurement, 1983, 7 (4), 451-472.

Kaplan, L. Education and Mental Health. New York: Harper and Row, Publishers, 1971.

Katz, P. & Zigler, E. Self-image disparity: a developmental approach. Journal of Personality and Social Psychology, 1967, 5, No. 2, 186-195.

Mangusson, D., Duner, A. & Zetterblum. G. Adjustment: A longitudinal study. New York: John Wiley & Sons, 1975.

Marjoribanks, K. Ethnicity, family environment and adolescents' aspirations: a follow-up study. Journal of Educational Research, 1984, 77, 166-171.

Marjoribanks, K. Family environments. In Walberg, H. Educational Environments and Effects. Berkeley: McCutchan Publishing Corporation, 1979.

Mauss, R.E. Social cognition: David Elkind's theory of adolescent egocentrism. Adolescence, 1982, 17 (66), 249-265.

Mead, G.H. Mind, Self and Society. Chicago: University of Chicago Press, 1934.

Moos, R. Evaluating Educational Environments. San Francisco: Jossey-Bass Publishers, 1976.

Moos, R. & Insel, P. ed. Issues in Social Ecology. Palo Alto, California: National Press Books, 1974.

Morrill, W., Hurst, J., Oetting, E. et al. Dimensions of Intervention for Student Development. New York: John Wiley & Sons.

Muuss, R.E. Theories of Adolescence. (2nd edition). New York: Random House, 1968.

Piaget, J. Comments of Vygotsky's Critical Remarks Concerning "The Language and Thought of the Child" and "Judgment and Reasoning in the Child." Cambridge, Mass.: M.I.T. Press, 1962.

Robinson, J. and Shaver, P. Measures of Social Psychological Attitudes. Ann Arbor, Michigan: Institute for Social Research, 1978.

Schreiber, D., "700,000 Dropouts," American Education, 1968, 4, 5-7.

Singer, Dorothy G. and Revenson, Tracey A. A Piaget Primer: How a Child Thinks. New York: International Universities Press, Inc. 1978.

Taifel, H. Social Identity and Intergroup Relations. Cambridge: Cambridge University Press, 1982.

Thomas, W.I. Social Organization and Social Personality, Selected Papers, Chicago: University of Chicago Press, 1966.

Webster, M. & Sobieszek B. Sources of Self-evaluation. New York: John Wiley & Sons, 1974.